CALIFORNIA WILDLIFE HABITAT RELATIONSHIPS SYSTEM

maintained by the

CALIFORNIA DEPARTMENT OF FISH AND GAME

and supported by the

CALIFORNIA INTERAGENCY WILDLIFE TASK GROUP Database Version 8.1 (2005)

B239 Pigeon Guillemot Cepphus columba

Family: Alcidae Order: Charadriiformes Class: Aves

Written by: S. Sanders Reviewed by: H. Cogswell Edited by: R. Duke, S. Granholm

DISTRIBUTION, ABUNDANCE, AND SEASONALITY

Fairly common in subtidal and intertidal marine habitats, and on rocky shores from the Oregon border south to Point Conception and Santa Barbara Island (Cogswell 1977, Sowls et al. 1980). Adults are present from February to late August on the Channel Islands, and from March through September on the Farallon Islands (Sowls et al. 1980). Uncommon and local the remainder of the year. Winter whereabouts unknown, however, a northward movement is suspected (DeSante and Ainley 1980, Sowls et al. 1980). Conservatively estimated to number about 15,000 in California, with the largest concentration occurring at nesting colonies on the Farallon Islands (approximately 3000). About 1300 use colonies along the coast in the vicinity of Santa Cruz (Sowls et al. 1980). Other large breeding colonies occur at Point Arguello in Santa Barbara Co., Fish Rocks off Sonoma Co., and Castle Rock, Sugarloaf Island, and Prince Island off Humboldt Co. (Sowls et al. 1980). Occurs regularly south to Point Mugu in Ventura Co. (Garrett and Dunn 1981), and infrequently in marine pelagic waters.

SPECIFIC HABITAT REQUIREMENTS

Feeding: During the breeding season, subsists largely on small fish. Pursues and captures prey in water near coast or island shores (Follett and Ainley 1976). Also reported to eat small crabs and shrimp (Krasnow et al. 1978), as well as mollusks, crustaceans, and polychaete worms (Terres 1980). Drent (1965) reported that parents bring young an average of 16 food loads a day, typically bringing a single fish each time.

Cover: When not feeding, often rests on seacliff ledges, or on the surface of coastal waters (Cogswell 1977).

Reproduction: Nests in cliff crevices and talus slopes, or occasionally in burrows (Cogswell 1977). Also uses human-made structures such as pipes, culverts, or crevices in wharves (Campbell 1977). Eggs are laid within these crevices on bare soil or rock, or sometimes on a loose bed of shells and pebbles (Sowls et al. 1980).

Water: No known requirement for fresh water.

Pattern: Needs rocky, undisturbed shoreline for nesting, and access to nearby marine waters for feeding (Sowls et al. 1980).

SPECIES LIFE HISTORY

Activity Patterns: Diurnal; returns to nest from inshore feeding grounds at 1-2 hr intervals (Sealy 1972).

Seasonal Movements/Migration: Winter range of California's breeding population is unknown, but DeSante and Ainley (1980) reported individuals banded on the Farallon Islands being recovered mostly in the north, as far as British Columbia. Sowls et al. (1980) also suggested that a northward movement takes place after breeding. Small numbers remain locally within the breeding range.

Home Range: Sealy (1972) and Sowls et al. (1980) suggested rather low nesting densities, but precise density estimates for given areas of foraging habitat are unavailable.

Territory: No data found.

Reproduction: On the Channel Islands, lays eggs from mid-April through mid-June, with a peak in early May. Young are hatched from mid-May through mid-July, with a peak in early June. Young are fledged from late June through late August, with a peak in mid-July (Hunt et al. 1979). Reproductive events occur 2-3 wk later on the Farallon Islands and farther north in California (Sowls et al. 1980). Monogamous; forms loose colonies with a few pairs dispersed over suitable nesting habitat; occasionally a pair will nest solitarily (Sealy 1972). Clutches usually contain 2 eggs, but about 9% contain only 1 (Drent 1965). Incubation period 30-32 days. Parents share incubation duties by trading off every 1-2 hr (Sealy 1972). Nestlings are semiprecocial and downy; nestling period lasts 35-45 days (Drent 1965). Fledglings leave the nest at about 90% adult weight (Drent 1965).

Niche: Not highly vulnerable to human disturbance because of relatively low nesting density and inaccessible nest sites. Nevertheless, readily abandons nest if disturbed during incubation or brooding (Sowls et al. 1980). Spends much time on inshore waters where oil exploration and development are centered; therefore, vulnerable to oil pollution (Sowls et al. 1980). The warm ocean temperatures of the 1983 breeding season resulted in a dramatic nesting failure (Ainley 1983).

REFERENCES

- Ainley, D. G. 1983. El Nino in California. Point Reyes Bird Observatory Newsl. 62:1-4. Campbell, R. W. 1977. Use of man-made structures as nest sites by pigeon guillemots. Can. Field-Nat. 91:193-194.
- Cogswell, H. L. 1977. Water birds of California. Univ. California Press, Berkeley. 399pp. Desante, D. F., and D. G. Ainley. 1980. The avifauna of the South Farallon Islands, California. Studies in Avian Biol. No. 4. Cooper Ornithol. Soc., Lawrence, KA. 104pp.
- Drent, R. H. 1965. Breeding biology of the pigeon guillemot, Cepphus columba. Ardea 53:99-160
- Follett, W. I., and D. G. Ainley. 1976. Fishes collected by pigeon guillemots, Cepphus columba (Pallas), nesting on Southeast Farallon Island, California. Calif. Fish and Game 62:28-31.
- Garrett, K., and J. Dunn. 1981. Birds of southern California. Los Angeles Audubon Soc. 408pp.
- Hunt, G. L., Jr., R. K. Pitman, M. Naughton, K. A. Winnett, A. Newman, P. R. Kelly, and K. T. Briggs. 1979. Distribution, status, reproductive ecology and foraging habits of breeding seabirds. Pages 1-399 in summary of marine mammal and seabird surveys of the Southern California Bight area, 1975-1978. U. S. Dep. Inter., Bur. Land Manage., Los Angeles. Publ. PB-81-248-205.
- Krasnow, L. D., G. A. Sanger, and D. W. Wiswar. 1978. Nearshore feeding ecology of marine birds in the Kodiak area, 1978. Pages 348-394 in C. J. Lensink, P. J. Gould, and G. A. Sanger, eds. Population dynamics and trophic relationships of marine birds in the Gulf of Alaska. Natl. Oceanic Atmos. Admin., Boulder CO.
- Sowls, A. L., A. R. DeGange, J. W. Nelson, and G. S. Lester. 1980. Catalog of California seabird colonies. U.S. Dep. Inter., Fish and Wildl. Serv., Wash. DC. Biol. Serv. Program FWS/OBS-80/37. 371pp.
- Sealy, S. G. 1972. Adaptive differences in breeding biology in the marine bird family Alcidae.

Ph.D. Thesis, Univ. Michigan, Ann Arbor. 283pp.

Sealy, S. G. 1974. Breeding phenology and clutch size in the marbled murrelet. Auk 91:10-23.

Terres, J. K. 1980. The Audubon Society encyclopedia of North American birds. A. Knopf, New York. 1100pp.

Species notes are designed to support the species-habitat relationships database models in the California Wildlife Habitat Relationships (CWHR) System and are also published within the current version of the CWHR software. Please cite as: California Department of Fish and Game. California Interagency Wildlife Task Group. 2005. California Wildlife Habitat Relationships version 8.1 personal computer program. Sacramento, California.